

RESEARCH ARTICLE

The Productivity Improvement Effort of UMM Medical Center (UMC) Pharmacy from Customers Perspectives

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ABSTRAK

Pendahuluan : Pengukuran keberhasilan penerapan manajemen dalam suatu organisasi atau perusahaan dapat dilihat dari kinerja organisasi atau perusahaan tersebut. *Perspektif customer* yang digunakan untuk mengukur kinerja yaitu dengan melihat kepuasan pasien dengan mengukur *Importance* dan *Performance matrix* dan pertumbuhan pelanggan. **Tujuan:** Untuk dapat mengetahui capaian kinerja di Apotek UMM Medical Center (UMC) maka dilakukan pengukuran dengan melihat dari *perspektif customer*.

Metode: Penelitian ini menggunakan rancangan penelitian studi kasus non eksperimental yang bersifat deskriptif analitik terhadap data yang dihimpun. Data diperoleh secara retrospektif maupun prospektif. Data retrospektif untuk mengetahui pertumbuhan pelanggan, sedangkan prospektif untuk mengetahui kepuasan pelanggan dengan analisa *importance* dan *performance matrix*.

Hasil: Hasil penelitian menunjukkan bahwa : a) Customer belum merasa puas dengan pelayanan di apotek ditunjukkan dengan nilai *servqual* total sebesar -0,227, b) dimensi *tangibles*, *reliability*, *responsiveness*, dan *assurance* saat ini telah dapat memenuhi harapan customer, dan membuat customer merasa puas terhadap kualitas pelayanan jasa tersebut, c) tidak ada peningkatan *Customer growth* (0%) di tahun 2014 dan 2015.

Kesimpulan: Dapat disimpulkan bahwa upaya peningkatan kinerja di Apotek UMC dari perspektif customer belum tercapai secara optimal, sehingga perlu dilakukan perbaikan kinerja.

Kata kunci : Perspektif Customer, Peningkatan Kinerja, Apotek.

ABSTRACT

Introduction: The success measurement of management application in an organization or company can be seen from the company or organization's productivity. Customer perspective used to measure productivity is by looking patients' satisfaction by measuring importance and performance matrices and customers growth. **Objectives:** To identify the performance achievement in UMM Medical Center (UMC) pharmacy, by measuring the customers perspectives.

Methods: This research is using the research design of non experimental case study, descriptive analysis of the data obtained. Data were gathered retrospectively and prospectively. Retrospective data to figure the customers growth, as for prospective data to find out the customer satisfaction by importance and performance matrix.

Results: Results indicated that: a) customers are not satisfied by the service in the pharmacy indicated by total *servqual* values of -0,227, b) dimensions of *tangibles*, *reliability*, *responsiveness*, and *assurance* currently are meeting the expectations of the customers and make customers feel satisfied towards the quality of service, c) there is no increase of *Customer growth* (0%) during year 2014 and 2015.

Conclusion: The productivity improvement efforts of Pharmacy in UMC from customers perspective are not achieved optimally, the productivity improvement is needed.

Keywords : Customers perspectives, productivity improvement, pharmacy

INTRODUCTION

Health is one of the human rights that must be obtained by whole society and one of the welfare that must be realized according to the ideal of Indonesians. Every Indonesian citizens have equal right in health and have the right to get secure, qualified, and accessible health services (Trisnawati *et al.*, 2015). Balanced Scorecard (BSC) is scoring card used to measure performance by observing the balance between financial and non financial, short and long term and also including internal and external factors (Kaplan dan

Norton, 1996). The utilization of BSC is very relevant during this competitive globalization era these days (Ghosh dan Mukherjee, 2006).

Pharmacy is a pharmaceutical service where pharmaceutical practices is conducted by pharmacist. One of the services is service for doctors prescriptions, medications informations and also medication development according to the legislations (Depkes, 2014).

Measurement of management application achievement within organization or company can

be measured from the organizational or company productivity. To investigate the productivity achievement in UMM Medical Center (UMC) Pharmacy, a measurement from customers' perspective was conducted. Customers' perspective used to measure productivity is to find out the patients satisfaction by measuring importance and performance matrix and customers growth. UMC Pharmacy has not yet conducted a productivity measurement so it is not known how far the achievement of the management for tangible and intangible assets in achieving visions and goals of the organization.

METHODS

a. Research Design

This research used a descriptive analytic case study non experimental for the data obtained. This research aims to investigate the productivity of UMC Pharmacy from customers' perspective. Data were obtained retrospectively and prospectively. Retrospective data was used to find out the customers growth with importance and performance matrix analysis, while the prospective data used to acknowledge costumers' satisfaction by analizing importance and performance matrices.

b. Research Subjects

1. Population and Samples

Population in this research using target population. Target population in this research are all patients with prescribed medications to UMC pharmacy, incoming prescriprions in UMC clinic, financial data of the pharmacy and other supporting documents. Samples for this research are 110 respondents with inclusion criteria as follows:

- 1) Patients or patients' relatives consented to fill in questionnaires
- 2) Patients or patients' relatives who can cooperate properly and consented to fill in questionnaires
- 3) Patients or patients relatives who can understand questionnaires clearly and properly
 - a. Incoming prescriptions in UMC Pharmacy every Monday – Saturday at 08.00 – 21.00 Western Indonesian Time.

Statistical Analysis

a) Descriptive Analysis

This analysis is used to decribe the characteristics of the patients for the research purposes, it is lead to information description and not to test hypothesis (Sugiyono, 2012). Descriptive study aims to

systematically describe a factual and accurate about a population or certain area about certain characteristics or factors (Hartanto, 2003).

b) Quantitative Analysis

This technique is using quantitative analysis, therefore the data analysis technique is using statistical method.

c) Importance dan Performance Matrices Analysis Method

The main point of this concept is customer satisfaction measured its correlation with what are the duties in a pharmacy to produce a high quality service. The term satisfaction is replaced with the term importance or the importance level according to patients perception. Then, the importance of this variable was correlated to the reality felt by the patients. From each items of the questions, the productivity index were counted by counting the average ot the importance level and the productivity levels of the pharmacists. The measurement of customer satisfactions were based on multi-item scale which deseigned to measure expectations and productivity, gaps between the two on five main dimensions of service qualities (reliability, responsiveness, assurance, emphaty, and tangible). Those five dimensions were described in each detailed attributes for expectations and productivity variable arranged into questions based on Likert Scale (Strongly Disagree = 1 to Strongly Agree =5). The evaluation of service using SERVQUAL model include the calculation of value differences given by the customers for each pairs of statements about expectations and productivity. A satisfied customer is when the productivity value is bigger compared to the expectation value, and unsatisfied customer is when expectation is bigger than productivity (Tjiptono dan Chandra, 2011). From the average of importance index and average productivity index are used as cutting points so then the cutting lines are divided into 4 parts of quadrants.

- Quadrant I (Concentrate Here), which is area loaded with variables considered important by the patients but in reality is not as they are hoping. This variable need continous revisions (Nanda, 2014).
- Quadrant II (Keep Up to the Good Work), which is the area indicated variables considered important by the patients and also satisfying. This variable must be maintained. (Siboro, 2013)
- Quadrant III (Low Priority), which is the area loaded with variables considered less important by patients and unsatisfactory productivity.
- Quadrant IV (Possible Overskill), which is the area with less important variables considered by the patients but the service is too much.

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Table 1. Distribution Frequency of Patient's Age

Age (Years)	Number of Patients (n)	(%)
< 17	0	0
17 – 30	97	88
31 – 40	9	8
41 – 50	3	3
>50	1	1
Total	110	100

Table 2. Reliability Analysis Result of Research Instrument

Variables	Alpha Cronbach (based on standardized items)	Remarks
Customer Satisfaction	0.944	Reliability level very high

d. Customer Growth.

Measuring the customer growth by investigating the number of customers from year 2014 and 2015.

RESULTS

Patients Demographic

The patients demographic were obtained from 110 outpatients from the research samples. Patients demographic consisted of four items which are patient's demographic based on age, educational level, sex and occupation.

Demographic data of the patients is necessary to obtained the comprehensive picture about patients condition used to collaborating the data and measurement results with investigated variables to give research result.

Age Demographic

Distribution frequency of patient's age for this research is illustrated on Table 1.

Education Level Demographic

Distribution frequency for educational level of the patient for this research is illustrated on Figure 1.

Customer Satisfaction

The accuracy of hypothesis testing of the correlations between various variables is depending on the data quality used in the test. Moreover, before testing the hypothesis, reliability and validity of the instrument used are necessary. Research instrument testing of validity and reliability towards 20 respondents obtained that the result of the instrument used for the research is valid with significance values of $p < 0.05$ (Masrun in Sugiyono, 2003:106), and also an instrument (questionnaire) is reliable if the reliability coefficient

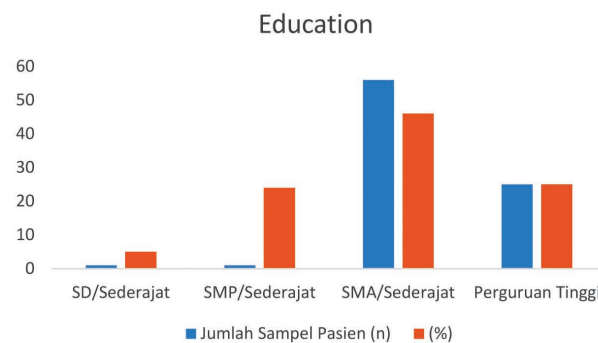


Figure 1. Patient's Education Level (n=110)

is 0,6 or more (Arikunto, 2002).

Based on the table above, it can be explained that for the 15 items of service quality dimensions developed by researcher, and whole items instruments are qualified for validity test because each have significance values (p) smaller than alpha 0,05. Based on that, all items of the instrument of the total observed variables can be included in further testing.

Furthermore, the result of the instrument reliability of the research briefly illustrated on the table 2.

Furthermore, according to the data illustrated on the table above, it can be explained that all items as indicator from various variables observed are reliable, because the values of alpha cronbach from tested variables have SIA (Standardized Item Alpha) bigger than allowed reliability value of 0,6.

Importance dan Performance Matrix Analysis Result.

Servqual model include the calculation difference between given values from patients in UMC pharmacy who are become respondents for each pairs of statements corresponding with expectations and patients perception about productivity from UMC pharmacy.

To investigate the result of servqual dimension by dimension calculations, is illustrated on the table 3.

The calculation result of total servqual found that the quality of the productivity of UMC pharmacy is far from good. This can be proven from the negative value on total servqual of -0,227. It is the evidence that the productivity quality of UMC Pharmacy is not meeting with customers expectations yet.

Carthesius Diagram

Carthesius Diagram analysis is used to illustrate the service variable ranks of the main priority, low priority, need to be maintained, and over implementation so it can give consumers satisfaction. From Carthesius Diagram, it can be observed to which position of the

Table 3. Servqual Dimension by dimension Calculation in UMC Pharmacy

No.	Dimension	Average Productivity	Average Expectation	Servqual Score
1	Tangibles	3.617	3.283	-0.333
2	Reliability	3.617	3.313	-0.303
3	Responsiveness	3.530	3.307	-0.223
4	Assurance	3.640	3.413	-0.227
5	Emphaty	3.120	3.073	-0.047
	TOTAL	3.505	3.28	-0.227

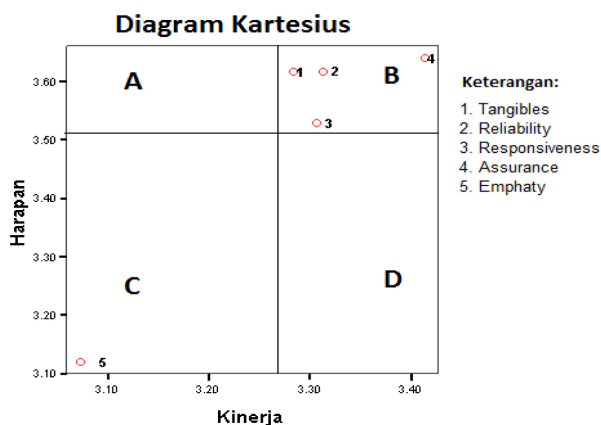


Figure2. The Result of Carthesius Diagram per Dimesion

productivity overloadness of UMC Pharmacy in giving services to the customers and on which position is the lack of productivity of UMC pharmacy in effort to give service to the customers.

The result of Carthesius Diagram analysis per dimesions is illustrated in Figure 2.

Customers Growth

Customer growth is measured by observing customers number in UMC pharmacy per months

on the year 2014 and 2015. Data obtained were from patients/ visitors of UMC pharmacy. Below is the result of the measurement of customer growth in UMC Medical Center Pharmacy illustrated in table 4 and table 5.

DISCUSSION

This research is using questionnaire instruments consisted of three parts, first part is preliminary questionnaire consisted of statements about respondents characteristics, second part of the questionnaire is about expectation and respondents perception about received service quality. Instrument used for the second part of this study is Servqual in questionnaire format adopted and modified from Parasuraman *et al* (1988).

Based on Table 3, it is illustrated that the calculation of servqual based on dimension by dimension, the average values of productivity (based on UMC Pharmacy productivity) nothing is over the average of expectation value. This means that dimension by dimension the productivity of UMC pharmacy service quality is not yet maximum according to the customer satisfaction. The presence of negative values on servqual total of -0,227. The reality indicated that the productivity quality of UMC pharmacy is not met

Table 4. Measurement Result of Customers Growth in UMC Pharmacy year 2014

NO	Month	Numbers of Prescriptions	Percentage (%)	Customers Growth
1.	January	435	8%	-
2.	February	477	8%	1%
3.	March	621	11%	3%
4.	April	524	9%	-2%
5.	May	447	8%	-1%
6.	June	368	7%	-1%
7.	July	223	4%	-3%
8.	August	275	5%	1%
9.	September	591	11%	6%
10.	October	558	10%	-1%
11.	November	521	9%	-1%
12.	December	574	10%	1%
Total		5614		0%

Table 5. Measurement Result of Customers Growth in UMC Pharmacy year 2015

NO	Month	Numbers of Prescriptions	Percentage (%)	Customers Growth
1.	January	532	10%	-
2.	February	452	8%	-1%
3.	March	668	12%	4%
4.	April	590	11%	-1%
5.	May	473	9%	-2%
6.	June	340	6%	-2%
7.	July	154	3%	-3%
8.	August	326	6%	3%
9.	September	455	8%	2%
10.	October	551	10%	2%
11.	November	533	10%	0%
12.	December	366	7%	-3%
Total		5440		0%

with customers' expectation.

Based on figure 2 carthesius diagram, it is evidenced that dimensions mapping as follows: there are 4 dimensions on quadrant B which are tangibles, reliability, responsiveness, and assurance. Based on the average mapping of scores between expectancy and customer perception on service quality given by UMC Pharmacy indicated that tangibles, reliability, responsiveness, and assurance dimensions currently is fulfilling customer expectation towards service quality. Dimension in quadrant C is empathy. The customers feels unnecessary to give service quality by UMC pharmacy on empathy dimension. However, the UMC Pharmacy still have to improve the service quality for the empathy dimension to support other dimensions so they can work according to customers expectation.

From data on table 4 and 5 indicated that the average of customer growth is not increased or 0 %, this productivity is lower compared to customer growth in RSUD Panembahan Senopati Bantul where the average of customer growth per month is 1 % (Erwinayanti, *et al.*, 2013) and PT. Arjuna Yoga Sakti where the customer growth is 20 % (Suen, *et al.*, 2012). From those results it is necessary to do pull marketing or stressing on which market can be entered for new market development. Pull marketing is appropriate for developing company and have brand image in the society (Ballard, 2011). UMC pharmacy is a business unit from Malang Muhammadiyah University and familiar to the surrounding communities. One of the business can be developed for the market development is by creating cooperation with BPJS and health clinics for employees and lecturers within the Malang

Muhammadiyah University campus. UMC Pharmacy is a pharmacy located within the campus area in Malang, and the average patients are students in the area and this is also affecting towards the customers growth because there are certain periods of long breaks in campus and this can affect to the income of the pharmacy. It is certain that the improvement for management and service in the pharmacy by pull marketing so that the customer growth from the pharmacy can increase, one of the stressing on which market to enter to have new market development.

CONCLUSION

The efforts to increase the UMC pharmacy productivity from customer perspective can be concluded as follows:

- Based on servqual values customers are not fully satisfied with the service of the pharmacy indicated by total servqual values of -0,227.
- Based on Importance dan Performance Matrix result analysis, the mapping result indicated that the tangibles, reliability, responsiveness, and assurance dimensions are included in quadrant B, which mean that these variables are considered important by the patients and need to be preserved.
- Based on the analysis of Importance dan Performance Matrix, the mapping result indicated that empathy dimension is included in quadrant C which indicated the less important variables by the patients and the productivity is less satisfactory.
- There are no customer growth improvement in year 2014 and 2015 indicated by the average value of 0 %.

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